May 2008
Employee Highlights

Chuck Wickham, Printing Services
Congratulations Chuck! Chuck just got his PMP certification. Chuck is the Design Office Project Control Specialist.

Blane Long, SAEO
Congratulations Blane! Blane successfully completed the Society of American Value Engineers (SAVE) International Certified Value Specialist (CVS) program. Blane started the certification process in May 2005. It has taken 3 years to obtain the necessary certification points just to be able to apply to take the CVS exam.

The purpose of the CVS examination is to test the applicant's knowledge of the Value Methodology. The examination is broken into seven categories: fundamentals, function analysis work problems, FAST Diagramming, team building, certification requirements, financial, and an essay. The exam is 4 hours long. He was recently informed that he had passed all areas of the test and is now a CVS.
CVS is the highest level of certification attainable through SAVE International.

Designation is reserved for Value Specialists and Value Program Managers who have demonstrated expert level experience and knowledge in the practice of the Value Methodology. The over all objective of the certification process is to create and maintain professional standards and improve the practice of the Value Methodology (VM) by identifying individuals who have successfully completed education and experience requirements. To establish and maintain a professional recognition program encouraging value specialists and value program managers in the Value Methodology field to improve professional skills and competence in accordance with established standards. To clarify methods, and procedures in the application of the Value Methodology; to create a better understanding of the value profession; to develop universal acceptance and increased application of value practices worldwide.

Value Engineering

A value engineering (VE) study was held April 28 – May 2 in Wenatchee on the US 2/97 – Cascade Interchange – EIS Refinement project. The overall project budget is at $14.1 M. Ten subject matter experts led by Blane Long, HQ Design, came up with 9 recommendations for the project totaling $1.93 M in project savings.

A VE study was held May 13-16 in Everett on the SR 522 – Snohomish River Bridge to US 2, Four Lane Widening project. The overall project budget is at $172.0 M. Ten subject matter experts led by Blane Long, HQ Design came up with 6 recommendations for the project totaling $22.38 M in project savings.

Design Academy

The 13th WSDOT Design Academy was held the week of May 5 at the Red Lion Hotel in Olympia. Forty two participants from all six regions, UCO, Headquarters and Washington State Ferries attended the 4 days of training and team challenges. The academy is facilitated by the region project development trainers and led by Blane Long, the Statewide Project Development Training Coordinator.

The mission of the Design Academy is to "To enhance the continued professional growth of the department's designers by providing a statewide venue to share design experiences through the use of structured classes, informal discussions, and open forums." The goal is to focus on the project delivery process while offering courses that will provide designers the tools and expertise to make sound engineering decisions.

Participants attended eight courses: Design Decisions, Project Management On-Line Guide, Risk Assessment, Deviations 101, Access Management, Bridge and Structures, Geotechnical

Issues, Design Manual, and Survey Issues. There were also evening presentations on Combining a Cost Risk Assessment with a Value Engineering Study, Real Estate, Environmental and using the Self Modeling Risk Spreadsheet.

Participants were divided into teams to work on selected design problems. The students were challenged to come up with creative solutions to the design problems they were presented with. At the end of the week each team presented their project solutions to the other teams along with executives and senior management.

The academy is currently offered twice a year. The next Design Academy will be December 8-1, 2008.

Ted Focke and Chris Schroedel presented the **Design Manual** to new participants at WSDOT's May 2008 Design Academy in Olympia. Their presentation covered:

- A walk through of how it's organized and "where to begin" with a new design project;
- Recent and planned changes to various chapters;
- Approvals and documentation procedures;
- Geometric standards, including: superelevation; full design level applications; cross section and median designs; sight distance requirements; grade intersections; roundabouts; and interchanges.

Design Policy Team News

Design Manual

After thorough reviews and approvals, the spring 2008 Design Manual revision was delivered to Printing Services this month and will be distributed to Regions in the first half of June.
The following chapters have been revised:

Ch 315 Value Engineering: Revised to incorporate **VE requirements** contained in SAFETEA-LU.
WSDOT policy now states that VE studies are required for:

- Projects with a total cost of $25 million or more (on all routes);
- Bridge projects with a total cost of $20 million or more;
- Design-Build projects meeting the above criteria; specifying the VE study must occur prior to issuing the project RFP.

Ch 440 Full Design Level: Revised to better clarify policy on selection of **design speed.** This revision is based on learning that some designers may not have read the entire passage in the manual on this topic. So we reorganized the guidance.

Ch 650 Sight Distance: This revision was prompted by a request to adopt AASHTO's **object height** value of 2 feet in all applications. Ted Focke, our Geometrics Engineer, investigated available research and we decided to retain our object height criteria of both 6 inches and 2 feet, depending on the case.

- So this revision better clarifies case selection of object height.
- The manual now does allow a 2 foot object height in conjunction with barrier.
- Added guidance for overlapping horizontal and crest vertical curves.

Ch 850 Traffic Control Signals: Revised chapter to:

- Retire previous Design Manual Supplement "Overhead Sign Illumination" by incorporation (Page 850-13).

- Update Figure 850-11b to be consistent with MUTCD Section 8D.07, 2003 Edition (changed 120' to 200'.)
- Correct numeric value in Figure 850-15; correct figure reference to 850-14a.

Ch 910 Intersections At Grade: Corrected lane width value in Figure 910-16.

Ch 915 Roundabouts: Corrected pavement marking arrows shown in Figures 915-6b & 6c.

Ch 1055 HOV Direct Access: Coordinating with the Traffic Signing Engineer, we revised this chapter to reflect current requirements for signing Direct HOV Access connections. While most signage applications are found in the MUTCD and Sign Fabrication Manual, the Design Manual does cover these unique signing requirements for Direct HOV access.

- Resulted in new Figures 17, 18, 19, and 20, replacing Figure 1055-17a & b.
- Page 10 of the text was revised to update reference to the revised figure numbers.

Safety Projects Guidance
Responding to an emerging need to spread scarce dollars further on safety projects, the Design Policy Team coordinated a **Design Manual Supplement** to be included with the regular revision package in June. This new supplement:

- Provides guidance to designers of safety projects programmed for the 09-11 Biennium.
- Revises the Design Matrices for **Intersection and Corridor safety improvements.**
- The matrices instruct that a **Project Analysis** be prepared to document the needs at a location and determine the appropriate **design elements** to address those needs.

WSDOT Technical Manual Managers Team

The Design Policy Team and Engineering Publications have brought people together from various locations in the agency to form the OneDOT Technical Manual Owners Team. We realize that our current system utilizes many manuals to plan, design, and build a WSDOT project. Our self-imposed charge is to find new and better ways to improve our functions and products. Having met several times now, the team has identified three key areas of further focus:

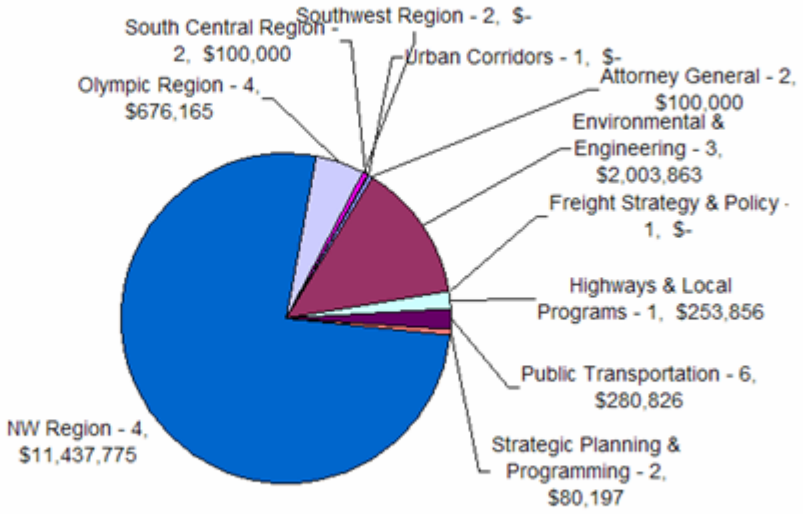
Issue 1 – Avoiding redundancy/ duplication/conflicting information in WSDOT manuals

Issue 2 – Standardizing WSDOT manuals: format, style, word usage, capitalization, etc.

Issue 3 – Communication between authors/customers/audience, and- electronic vs. paper

The team is underway developing multiple new solutions to address these old issues from the "paper age", and no doubt will be eager to present our change ideas later this year to those in WSDOT that can help make implementation a reality. Much of the solutions thus far capitalize on electronic means to collaborate on revision reviews and alert manual owners to forthcoming changes. Compared with our current technical manuals procedures, the Team envisions overall cost savings through implementation of our ideas.

Utilities, R/R and Agreements

Agreement Reviews Completed April 2008

Total Agreements Completed - 14 Total Dollar Amount - $14,932,682